

Claims

- [c1] 1. An abnormality management device connected via a network to an image forming device that includes a plurality of selectively used paper supply units or paper discharge units, the abnormality management device managing abnormalities in the image forming device and comprising:
- a display unit that displays an image of an image forming device in which the plurality of the paper supply units or paper discharge units can be visually distinguished from each other;
- an abnormality detection unit that detects abnormalities in the paper supply units or the paper discharge units based upon equipment data acquired from the image forming device; and
- an abnormality display unit that displays with emphasis the location of the paper supply unit or paper discharge unit in which an abnormality was detected by the abnormality detection unit on the image of the image forming device.
- [c2] 2. The abnormality management device set forth in claim 1, further comprising:

a default paper supply unit determining unit that determines whether one paper supply unit from amongst the plurality of the paper display units has been selected as a default; and

a default display unit that displays with emphasis the position of the paper supply unit selected as a default on the image of the image forming device by means of a representation that is different than a representation used to display the paper supply unit in which an abnormality was detected.

[c3] 3. The abnormality management device set forth in claim 1, further comprising:

an out of paper determining unit that determines based upon equipment data acquired from the image forming device whether any of the plurality of paper supply units have run out of paper; and

an out of paper display unit that displays with emphasis the position of a paper supply unit that has run out of paper on the image of the image forming device by means of a representation that is different than a representation used to display the paper supply unit in which an abnormality was detected.

[c4] 4. The abnormality management device set forth in claim 1, further comprising a paper size display unit that displays based upon equipment data acquired from the im-

age forming device the size of paper stored in each paper supply unit;

wherein the abnormality display unit displays an abnormality by means of a symbol or an image in a paper size display location of a paper supply unit in which an abnormality has been detected by means of the abnormality detection unit.

[c5] 5. The abnormality management device set forth in claim 1, further comprising a paper remaining display unit that displays based upon equipment data acquired from the image forming device the amount of paper remaining in each paper supply unit;

wherein the abnormality display unit displays an abnormality by means of a symbol or an image in a paper remaining display location of a paper supply unit in which an abnormality has been detected by means of the abnormality detection unit.

[c6] 6. The abnormality management device set forth in claim 1, further comprising a sound abnormality generating unit that generates a sound when an abnormality is detected in a paper supply unit or a paper discharge unit by the abnormality detection unit.

[c7] 7. An abnormality management system for an image forming device, comprising:

an image forming device comprising a plurality of selectively used paper supply units or paper discharge units;
and

an abnormality management device connected to the image forming device which manages abnormalities in the image forming device, the abnormality management device comprising:

a display unit that displays an image of an image forming device in which the plurality of the paper supply units or paper discharge units can be visually distinguished from each other;

an abnormality detection unit that detects abnormalities in the paper supply units or the paper discharge units based upon equipment data acquired from the image forming device; and

an abnormality display unit that displays with emphasis the location of the paper supply unit or paper discharge unit in which an abnormality was detected by the abnormality detection unit on the image of the image forming device.

[c8] 8. The abnormality management system set forth in claim 7, further comprising:

a default paper supply unit determining unit that determines whether one paper supply unit from amongst the plurality of the paper display units has been selected as

a default; and

a default display unit that displays with emphasis the position of the paper supply unit selected as a default on the image of the image forming device by means of a representation that is different than a representation used to display the paper supply unit in which an abnormality was detected.

[c9] 9. The abnormality management system set forth in claim 7, further comprising:

an out of paper determining unit that determines based upon equipment data acquired from the image forming device whether any of the plurality of paper supply units have run out of paper; and

an out of paper display unit that displays with emphasis the position of a paper supply unit that has run out of paper on the image of the image forming device by means of a representation that is different than a representation used to display the paper supply unit in which an abnormality was detected.

[c10] 10. The abnormality management system set forth in claim 7, further comprising a paper size display unit that displays based upon equipment data acquired from the image forming device the size of paper stored in each paper supply unit;
wherein the abnormality display unit displays an abnor-

mality by means of a symbol or an image in a paper size display location of a paper supply unit in which an abnormality has been detected by means of the abnormality detection unit.

[c11] 11. The abnormality management system set forth in claim 7, further comprising a paper remaining display unit that displays based upon equipment data acquired from the image forming device the amount of paper remaining in each paper supply unit; wherein the abnormality display unit displays an abnormality by means of a symbol or an image in a paper remaining display location of a paper supply unit in which an abnormality has been detected by means of the abnormality detection unit.

[c12] 12. The abnormality management system of the image forming device disclosed in claim 7, further comprising a sound abnormality generating unit that generates a sound when an abnormality is detected in a paper supply unit or a paper discharge unit by the abnormality detection unit.

[c13] 13. An abnormality management program that is executed in a computer that is connected via a network to an image forming device that includes a plurality of selectively used paper supply units or paper discharge

units, the abnormality management program managing abnormalities in the image forming device and comprising:

a display function that displays an image of an image forming device in which the plurality of the paper supply units or paper discharge units can be visually distinguished from each other;

an abnormality detection function that detects abnormalities in the paper supply units or the paper discharge units based upon equipment data acquired from the image forming device; and

an abnormality display function that displays with emphasis the location of the paper supply unit or paper discharge unit in which an abnormality was detected by the abnormality detection unit on the image of the image forming device.